



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,479	05/31/2001	Nischal Abrol	000256	1536
23696	7590	11/19/2004	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			DAVIS, CYNTHIA L	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,479

Applicant(s)

ABROL ET AL.

Examiner

Cynthia L Davis

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 1, 3, 4, 9, 11, 12, and 14-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Kumar.

Regarding claim 1, a method for resynchronizing a PPP link is disclosed in Kumar, column 1, lines 51-55 (disclosing using an IWF to coordinate base stations in a PPP network). Detecting a trigger indicating whether a remote station is associated with a new base station is disclosed in column 3, lines 4-7 (in soft handoff mode, a remote station is associated with a new base station). Determining whether the new base station is associated with a new network server, and re-synchronizing the PPP link if the remote station is associated with a new network server is disclosed in column 3, lines 7-15 (the synchronization procedures would take into account whether the new base station is associated with a new network server, so as to synchronize the communications between the base stations and the remote unit).

Regarding claim 12, a method for re-synchronization of a PPP link, and establishing a PPP link is disclosed in Kumar, column 1, lines 51-55 (disclosing using an IWF to coordinate base stations in a PPP network). Detecting a condition that indicates whether PPP re-synchronization is required and resynchronizing the PPP link

if it is determined that PPP resynchronization is required is disclosed in column 3, lines 4-7 (handoff mode is a condition in which re-synchronization is required).

Regarding claim 16, a computer-readable medium embodying a method for re-synchronizing a PPP link is disclosed in Kumar, column 11, line 47. Detecting a trigger indicating whether a remote station is associated with a new base station is disclosed in column 3, lines 4-7 (in soft handoff mode, a remote station is associated with a new base station). Determining whether the new base station is associated with a new network server, and re-synchronizing the PPP link if the remote station is associated with a new network server is disclosed in column 3, lines 7-15 (the synchronization procedures would take into account whether the new base station is associated with a new network server, so as to synchronize the communications between the base stations and the remote unit).

Regarding claim 17, a remote station apparatus is disclosed in column 3, line 6 (disclosing a mobile unit). Means for detecting a trigger indicating whether a remote station is associated with a new base station is disclosed in column 3, lines 4-7 (in soft handoff mode, a remote station is associated with a new base station). Means for determining whether the new base station is associated with a new network server, and means for re-synchronizing the PPP link if the base station is associated with a new network server is disclosed in column 3, lines 7-15 (the synchronization procedures would take into account whether the new base station is associated with a new network server, so as to synchronize the communications between the base stations and the remote unit).

Regarding claim 18, a base station apparatus is disclosed in column 3, line 5. Means for detecting a trigger indicating whether a remote station is associated with a new base station is disclosed in column 3, lines 4-7 (in soft handoff mode, a remote station is associated with a new base station). Means for determining whether the new base station is associated with a new network server, and means for re-synchronizing the PPP link if the remote station is associated with a new network server is disclosed in column 3, lines 7-15 (the synchronization procedures would take into account whether the new base station is associated with a new network server, so as to synchronize the communications between the base stations and the remote unit).

Regarding claims 3 and 14, the detecting comprising detecting a message indicating a handoff is disclosed in column 3, lines 4-7.

Regarding claim 4 and 15, the detecting comprising detecting coming out of dormancy is disclosed in column 3, line 59-column 4, line 2 (disclosing the need for synchronization during the reactivation process).

Regarding claim 9, the network server comprising a IWF is disclosed in column 1, lines 51-55.

Regarding claim 11, the remote station functioning in a CDMA environment is disclosed in column 1, line 20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2665

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 19, 21-23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar.

Regarding claim 19, a base station apparatus is disclosed in column 3, line 5, of Kumar. Means for detecting a trigger indicating whether a remote station is associated with a new base station is disclosed in column 3, lines 4-7 (in soft handoff mode, a remote station is associated with a new base station). Claim 19 further specifies that the detecting is done by a processor, which is not specifically disclosed in Kumar. However, a base station would normally have a processor to carry out such functions. It would have been obvious to one skilled in the art at the time of the invention to have a processor do the detecting. The motivation would be to use the part of the base station that is normally used to carry out the functions of the base station. A receiver adapted to receive and a transmitter adapted to transmit PPP re-synchronization signals, the receiver and transmitter being connected to the processor, is disclosed in column 3, lines 5-7 (the base station would not be able to communicate with the mobile unit if it did not have a receiver and transmitter).

Regarding claim 23, a remote station apparatus is disclosed in column 3, line 6. Means for detecting a trigger indicating whether a remote station is associated with a new base station, and determining whether the new base station is associated with a new network server is disclosed in column 3, lines 4-15 (in soft handoff mode, a remote station is associated with a new base station; also, the synchronization procedures would take into account whether the new base station is associated with a new network

server, so as to synchronize the communications between the base stations and the remote unit). Claim 23 further specifies that the detecting is done by a processor, which is not specifically disclosed in Kumar. However, a base station would normally have a processor to carry out such functions. It would have been obvious to one skilled in the art at the time of the invention to have a processor do the detecting. The motivation would be to use the part of the base station that is normally used to carry out the functions of the base station. A receiver adapted to receive and a transmitter adapted to transmit PPP re-synchronization signals, the receiver and transmitter being connected to the processor, is disclosed in column 3, lines 5-7 (the mobile unit would not be able to communicate with the base station if it did not have a receiver and transmitter).

Regarding claims 21 and 25, the detecting comprising detecting a message indicating a handoff is disclosed in column 3, lines 4-7.

Regarding claims 22 and 26, the detecting comprising detecting coming out of dormancy is disclosed in column 3, line 59-column 4, line 2 (disclosing the need for synchronization during the reactivation process).

3. Claims 2, 13, 20, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar in view of Rasanen. The detecting comprising detecting an RLP reset is missing from Kumar. However, Rasanen discloses in column 2, lines 35-37, and column 7, lines 4-6, that the RLP reset state causes the releasing of a connection when the quality of the link degrades to a certain level. It would have been obvious to one skilled in the art at the time of the invention to resynch the PPP

connection when an RLP reset was detected. The motivation would be to resynch the remaining connections to the mobile terminal when it releases one of its connections.

4. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar in view of Ludwig.

Regarding claim 5, the determining comprising whether a received packet is a control packet is missing from Kumar. However, Ludwig discloses that control packets, such as LCP request packets and IPCP request packets, are exchanged whenever a link is established in column 4, lines 44-62. Kumar discloses in column 3, lines 4-15, that a new link being established is a time when synchronization would need to occur. It would have been obvious to one skilled in the art at the time of the invention to use control packets to determine when to synchronize. The motivation would be to use packets that are normally exchanged when an event that will necessitate synchronization occurs.

Regarding claim 6, the control packet comprising a LCP negotiation request is missing from Kumar. However, Ludwig discloses that LCP request packets are exchanged when a link is established in column 4, lines 44-62. Kumar discloses in column 3, lines 4-15, that a new link being established is a time when synchronization would need to occur. It would have been obvious to one skilled in the art at the time of the invention to use LCP request packets to determine when to synchronize. The motivation would be to use packets that are normally exchanged when an event that will necessitate synchronization occurs.

Regarding claim 7, the control packet comprising a IPCP negotiation request is missing from Kumar. However, Ludwig discloses that IPCP request packets are exchanged when a link is established in column 4, lines 44-62. Kumar discloses in column 3, lines 4-15, that a new link being established is a time when synchronization would need to occur. It would have been obvious to one skilled in the art at the time of the invention to use IPCP request packets to determine when to synchronize. The motivation would be to use packets that are normally exchanged when an event that will necessitate synchronization occurs.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar in view of Kalliokulju. The re-synching being done only on the Um interface is missing from Kumar. Kalliokulju discloses in column 4, lines 1-3, that the wireless communications device is coupled to the base station via radio interface Um. It would have been obvious to one skilled in the art at the time of the invention to do the synching on Um. The motivation would be to synch the connection between the mobile and the base station.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar in view of Basilier. The network server comprising a PDSN is missing from Kumar. However, Basilier discloses in column 4, lines 2-4, use of a PSDN in a mobile network. It would have been obvious to one skilled in the art at the time of the invention to use a PDSN as the network server. The motivation would be to support packet communications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLD
10/25/2004

CLD
10/25/04



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600